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Parag M. Doshi

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EXAMINER

GREY, CHRISTOPHER P

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/055,333	Applicant(s) DOSHI ET AL.	
	Examiner CHRISTOPHER P. GREY	Art Unit 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1,4-12,15-21 and 24-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Havinis (US 20030202521) in view of Higuchi (US 20050286501).

Regarding claim 1, Havinis discloses querying a unified location management device having location information (see elements 270 and 280 in fig 1, where the HLR is a database containing addresses equivalent to location info) stored therein for users of said different network protocols (see elements 200 and 100 in fig 1, where each network uses a different protocol such as H.323 and H.324), said users including mobile users (paragraph 0018-0020, where the MS is the user, and see fig 2, 200).

relaying mobile user location related information from the unified location manager regarding a user of the first and second network (paragraph 0020, where the HLR relays info to the GMSC, and 1st and 2nd networks elements 110 and 210 in fig 3).

selecting a gateway based on the location information provided (paragraph 0020-0022, notice that an MG is selected).

wherein for calls from an internet telephony device (fig 1 where the calling device is equivalent to an internet telephony device, as the H.323 protocol is implemented, and is used within various internet applications) to a mobile device, said unified location manager

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operates as an inbound proxy for a given domain **(the HLR, 280 in fig 1 acts as an inbound proxy for a given domain, where that domain is broadly interpreted as any domain and is equivalent to the domain 210 in fig 1).**

for PSTN originated calls **(fig 3, where a call may originate from the PSTN 410)** to an internet telephony user, cellular numbers are used to denote internet telephony telephones **(a B-number being used to denote the called party as shown in para 0024 where the HLR stores these numbers).**

allowing selection of a routable temporary phone number **(para 0020, HLR provides subscriber information).**

Havinis does not specifically disclose such that a call path can bypass a callee's home MSC or gateway MSC.

Higuchi discloses a call path can bypass a callee's home MSC or gateway MSC **(fig 20, where the path from the IP telephone passes through an IP network and the gateways, but does not pass through an MSC).**

It would have been obvious to one of the ordinary skill in the art at the time of the invention was disclosed to modify the network setup of Havinis, as taught by Higuchi, since stated in para, 0027, that such a modification will assist in call setup/connection.

Regarding Claim 4

Havinis discloses the location related information being used to assign a location dependent routable temporary telephone number for use in the gateway selection **(paragraph 0020 and see step 240 in fig 2).**

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Regarding Claim 5 Havinis discloses wherein said internet telephony accounts are SIP accounts (see fig 1, where the internet telephony users 100 employ H.323 protocol, where the signaling protocol is widely used within H.323).

Regarding Claim 6 Havinis discloses the mobile location information being able to correspond to an internet telephony user (paragraph 0009 and paragraphs 0020-0022).

Regarding Claim 7 Havinis discloses the location related information providing assignment of a GSM/UMTS temporary phone number (paragraphs 0018 and 0020).

Regarding Claim 8 Havinis discloses the unified location manager being operable as a home location register for cellular networks and as a user registration and address resolution device for internet telephony networks (paragraphs 0009, 0017-0022).

Regarding Claim 9 Havinis discloses an HLR and a roaming number (paragraphs 0020), where the HLR inherently assigns a care of address for a mobile user.

Regarding Claim 10 Havinis discloses one of the first and second networks being circuit switched and one of the first and second networks being an internet telephony network (see fig 1).

Regarding Claim 11 Havinis discloses the plurality of network protocols comprising at least 2 of ANSI-41, GSM MAP, SIP, H.323 (paragraphs 0004, 0009, 0018).

Regarding claim 12, Havinis discloses querying a unified location management device having location information (see elements 270 and 280 in fig 1, where the HLR is a database containing addresses equivalent to location info) for multiple mobile network technologies stored therein (para 0024, where the HLR has stored within B and C numbers, where B and C numbers pertain to different network technologies such as the PLMN and PSTN).

providing location related information for said mobile user in said second network for use by said first network in selection of said gateway **(para 0022, notice the MGC of the first network LAN selects a gateway MG in response to a response which was a result of location info discussed in para 0020).**

wherein for calls from an internet telephony device **(fig 1 where the calling device is equivalent to an internet telephony device, as the H.323 protocol is implemented, and is used within various internet applications)** to a mobile device, said unified location manager operates as an inbound proxy for a given domain **(the HLR, 280 in fig 1 acts as an inbound proxy for a given domain, where that domain is broadly interpreted as any domain and is equivalent to the domain 210 in fig 1).**

for PSTN originated calls **(fig 3, where a call may originate from the PSTN 410)** to an internet telephony user, cellular numbers are used to denote internet telephony telephones **(a B-number being used to denote the called party as shown in para 0024 where the HLR stores these numbers).**

allowing selection of a routable temporary phone number **(para 0020, HLR provides subscriber information).**

Havinis does not specifically disclose such that a call path can bypass a callee's home MSC or gateway MSC.

Higuchi discloses a call path can bypass a callee's home MSC or gateway MSC **(fig 20, where the path from the IP telephone passes through an IP network and the gateways, but does not pass through an MSC).**

It would have been obvious to one of the ordinary skill in the art at the time of the invention was disclosed to modify the network setup of Havinis, as taught by Higuchi, since stated in para, 0027, that such a modification will assist in call setup/connection.

Regarding Claim 15 Havinis discloses the location related information being used to assign a location dependent routable temporary telephone number for use in the gateway selection (paragraph 0020 and see step 240 in fig 2).

Regarding Claim 16 Havinis discloses wherein said internet telephony accounts are SIP accounts (see fig 1, where the internet telephony users 100 employ H.323 protocol, where the signaling protocol is widely used within H.323).

Regarding Claim 17 Havinis discloses the mobile location information being able to correspond to an internet telephony user (paragraph 0009 and paragraphs 0020-0022).

Regarding Claim 18 Havinis discloses the unified location manager being operable as a home location register for cellular networks and as a user registration and address resolution device for internet telephony networks (paragraphs 0009, 0017-0022).

Regarding Claim 19 Havinis discloses an HLR and a roaming number (paragraphs 0020), where the HLR inherently assigns a care of address for a mobile user.

Regarding Claim 20 Havinis discloses one of the first and second networks being circuit switched and one of the first and second networks being an internet telephony network (see fig 1).

Regarding claim 21, Havinis discloses a data server for storing location and service profile data (see elements 270 and 280 in fig 1, where the HLR is a database containing addresses equivalent to location info) for multiple differing network technologies including mobile

network technology (**para 0024, where the HLR has stored within B and C numbers, where B and C numbers pertain to different network technologies such as the PLMN and PSTN).**;

at least two network protocol gateways for translating incoming location information requests into a protocol independent format (**para 0017, where a media gateway must be chosen from obviously at least 2 gateways, and para 0022, where data is converted by the MG),**

a processor for interfacing between said data server and said protocol gateways (**fig 1, where GMSC 270 interfaces**), wherein mobile user location related information is able to be provided by said apparatus for use in selection of said gateway (**para 0022, notice the MGC of the first network LAN selects a gateway MG in response to a response which was a result of location info discussed in para 0020).**

wherein for calls from an internet telephony device (**fig 1 where the calling device is equivalent to an internet telephony device, as the H.323 protocol is implemented, and is used within various internet applications**) to a mobile device, said unified location manager operates as an inbound proxy for a given domain (**the HLR, 280 in fig 1 acts as an inbound proxy for a given domain, where that domain is broadly interpreted as any domain and is equivalent to the domain 210 in fig 1).**

for PSTN originated calls (**fig 3, where a call may originate from the PSTN 410**) to an internet telephony user, cellular numbers are used to denote internet telephony telephones (**a B-number being used to denote the called party as shown in para 0024 where the HLR stores these numbers).**

allowing selection of a routable temporary phone number (**para 0020, HLR provides subscriber information**).

Havinis does not specifically disclose such that a call path can bypass a callee's home MSC or gateway MSC.

Higuchi discloses a call path can bypass a callee's home MSC or gateway MSC (**fig 20, where the path from the IP telephone passes through an IP network and the gateways, but does not pass through an MSC**).

It would have been obvious to one of the ordinary skill in the art at the time of the invention was disclosed to modify the network setup of Havinis, as taught by Higuchi, since stated in para, 0027, that such a modification will assist in call setup/connection.

Regarding Claim 24 Havinis discloses the location related information being used to assign a location dependent routable temporary telephone number for use in the gateway selection (paragraph 0020 and see step 240 in fig 2).

Regarding Claim 25 Havinis discloses wherein said internet telephony accounts are SIP accounts (**see fig 1, where the internet telephony users 100 employ H.323 protocol, where the signaling protocol is widely used within H.323**).

Regarding Claim 26 Havinis discloses the mobile location information being able to correspond to an internet telephony user (paragraph 0009 and paragraphs 0020-0022).

Regarding Claim 27 Havinis discloses the unified location manager being operable as a home location register for cellular networks and as a user registration and address resolution device for internet telephony networks (paragraphs 0009, 0017-0022).

Regarding Claim 28 Havinis discloses an HLR and a roaming number (paragraphs 0020), where the HLR inherently assigns a care of address for a mobile user.

Regarding Claim 29 Havinis discloses one of the first and second networks being circuit switched and one of the first and second networks being an internet telephony network (see fig 1).

Regarding Claim 30 Havinis discloses the plurality of network protocols comprising at least 2 of ANSI-41, GSM MAP, SIP, H.323 (paragraphs 0004, 0009, 0018).

3. Claims 2, 3, 13, 14, 22, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Havinis (US 20030202521) in view of Higuchi (US 20050286501) in further view of the admitted prior art.

Regarding Claim 2 Havinis discloses interworking between circuit switched networks and internet telephony and gateway selection.

Havinis does not specifically disclose optimizing gateway selection that minimizes any one of triangle routing, a PSTN call leg or an internet call leg.

The admitted prior art discloses optimizing gateway selection that minimizes any one of triangle routing, a PSTN call leg or an internet call leg (page 1 lines 15-23).

It would have been obvious to one of the ordinary skill in the art to optimize gateway selection by minimizing any one of triangle routing, a PSTN call leg or an internet call leg since it was known in the art that gateway selection is associated with several different policies related to the associated minimization as disclosed by the admitted prior art.

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Regarding claim 3

Havinis does not specifically disclose selection of the gateway being optimized by selecting a gateway that minimizes a circuit switched portion of a call.

The admitted prior art discloses the selection of the gateway being optimized by selecting a gateway that minimizes a circuit switched portion of a call (page 1 lines 15-23).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to optimize the gateway selection as disclosed by Havinis by minimizing the circuit switched portion of a call as disclosed by the admitted prior art.

Regarding Claim 13, Havinis discloses interworking between circuit switched networks and internet telephony and gateway selection.

Havinis does not specifically disclose optimizing gateway selection that minimizes any one of triangle routing, a PSTN call leg or an internet call leg.

The admitted prior art discloses optimizing gateway selection that minimizes any one of triangle routing, a PSTN call leg or an internet call leg (page 1 lines 15-23).

It would have been obvious to one of the ordinary skill in the art to optimize gateway selection by minimizing any one of triangle routing, a PSTN call leg or an internet call leg since it was known in the art that gateway selection is associated with several different policies related to the associated minimization as disclosed by the admitted prior art.

Regarding Claims 14,

Havinis does not specifically disclose selection of the gateway being optimized by selecting a gateway that minimizes a circuit switched portion of a call.

The admitted prior art discloses the selection of the gateway being optimized by selecting a gateway that minimizes a circuit switched portion of a call (page 1 lines 15-23).

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It would have been obvious to one of the ordinary skill in the art at the time of the invention to optimize the gateway selection as disclosed by Havinis by minimizing the circuit switched portion of a call as disclosed by the admitted prior art.

Regarding claim 22, Havinis discloses interworking between circuit switched networks and internet telephony and gateway selection.

Havinis does not specifically disclose optimizing gateway selection that minimizes any one of triangle routing, a PSTN call leg or an internet call leg.

The admitted prior art discloses optimizing gateway selection that minimizes any one of triangle routing, a PSTN call leg or an internet call leg (page 1 lines 15-23).

It would have been obvious to one of the ordinary skill in the art to optimize gateway selection by minimizing any one of triangle routing, a PSTN call leg or an internet call leg since it was known in the art that gateway selection is associated with several different policies related to the associated minimization as disclosed by the admitted prior art.

Regarding Claims 23, Havinis does not specifically disclose selection of the gateway being optimized by selecting a gateway that minimizes a circuit switched portion of a call.

The admitted prior art discloses the selection of the gateway being optimized by selecting a gateway that minimizes a circuit switched portion of a call (page 1 lines 15-23).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to optimize the gateway selection as disclosed by Havinis by minimizing the circuit switched portion of a call as disclosed by the admitted prior art.

Response to Arguments

4. Applicant's arguments filed December 20, 2007 have been fully considered but they are not persuasive.

(a) The applicant argued with respect to claims 1, 12 and 21, that the cited art does not disclose the applicants claimed, **“having location information stored for users of said different protocols”**.

The examiner maintains that the cited art discloses having location information stored for users of said different protocols, wherein Havinis discloses the HLR having both B numbers for support within the PLMN, and C numbers for support within the PSTN, where the numbers are equated to location information, and the users are located in different networks PLMN and PSTN, where these networks are of different protocols (para 0024 and fig 3). Further arguments are repetitive, and have been addressed above.

(b) The applicant argued on page 10 of 12 of the Remarks, that Higuchi teaches away from the applicants claimed invention.

The examiner contends that Havinis teaches the majority of the applicants claimed communication between networks supporting different network protocols, and Higuchi is only introduced to show the bypassing of an MSC. Only one element is taken from Higuchi and combined with Havinis, where communicating exclusively across an IP network is not that element.

(c) The applicant argued on page 10 of 12 of the Remarks that Higuchi does not provide a motivation to arrive at the applicants claimed invention.

The examiner contends that a motivation is provided such as that within the rejection of claim 1, wherein it would have been obvious to one of the ordinary skill in the art at the time of the invention was disclosed to modify the network setup of Havinis, as taught by Higuchi, since stated in para, 0027, that such a modification will assist in call setup/connection.

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTOPHER P. GREY whose telephone number is (571)272-3160. The examiner can normally be reached on 10AM-7:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Moe Aung can be reached on (571)272-7314. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Christopher P Grey/
Examiner, Art Unit 2616

/Aung S. Moe/
Supervisory Patent Examiner, Art Unit 2616